CLAM AMENDMENTS

1. (Currently Amended) A method of coating a tubular implantable medical device, comprising forming a layer of a coating composition that comprises a polymer and a solvent, on a surface of an applicator, and transferring at least some of the layer of the coating composition onto a tubular implantable medical device, wherein the tubular implantable medical device is supported on a mandrel.

2. (Original) The method of Claim 1, wherein the layer on the surface of the applicator has a thickness of about 2.5 microns to about 1000 microns.

3. (Original) The method of Claim 1, wherein the layer on the surface of the applicator has a thickness of about 25 microns to about 100 microns.

4. (Cancelled)

5. (Original) The method of Claim 1, wherein the layer of the coating composition is transferred to an outer surface of the device.

6. (Original) The method of Claim 1, wherein the viscosity of the coating composition is about 10 centipoises at ambient temperature and pressure to about 1000 centipoises at ambient temperature and pressure.

7. (Original) The method of Claim 1, wherein the device is a stent.

8. (Currently Amended) The method of Claim 1, wherein the coating composition further comprises ~~a polymer and a solvent, and optionally~~ a therapeutic substance.

9. (Currently Amended) A method of coating a tubular implantable medical device, comprising:

forming a layer of a composition that comprises a polymer and a solvent on a surface of an applicator substrate; and

rotating a tubular implantable medical device that is supported on a mandrel along a longitudinal central axis of the device while a surface of the device is in close proximity to or in contact with a surface of the applicator substrate.

10. (Cancelled)

11. (Original) The method of Claim 9, wherein the layer of the composition is applied to the outer surface of the device such that the inner surface of the device is not exposed to the coating composition.

12. (Original) The method of Claim 9, wherein the rotational speed of the tubular device is between 1 rotation per minute to 250 rotations per minute.

13. (Original) The method of Claim 9, wherein forming the layer of composition on the applicator substrate includes depositing a mass of the composition on the applicator substrate followed by leveling the composition so that the layer has a substantially uniform thickness.

14. (Original) The method of Claim 13, wherein leveling the composition comprises directing a gas to the coating composition, the gas having sufficient air flow to reduce the profile of the composition.

15. (Original) The method of Claim 13, wherein leveling the composition comprises positioning a barrier at a distance above the surface of the applicator substrate and at a position before the composition reaches the tubular device such that the movement of the applicator substrate past the barrier causes the composition to level to the substantially uniform thickness.

16. (Original) The method of Claim 9, wherein the surface of the applicator substrate is substantially flat.

17. (Original) The method of Claim 9, wherein the applicator substrate is cylindrical in shape.

18. (Currently Amended) A method of coating a tubular implantable medical device, comprising:

depositing a layer of a composition on a surface of an applicator;

positioning a tubular implantable medical device that is supported on a mandrel in close proximity to or in contact with the surface of the applicator; and

rotating the applicator to deposit the composition on the tubular device.

19. (Cancelled)

20. (Original) The method of Claim 18, wherein the composition is applied to the outer surface of the device or the inner surface of the device but not both at the same time.

21. (Original) The method of Claim 18, wherein the rotational speed of the applicator is between 0.1 rotations per minute to 200 rotations per minute.

22. (Original) The method of Claim 18, additionally comprising leveling the composition on the surface of the applicator so that the layer has a substantially uniform thickness.

23. (Original) The method of Claim 18, wherein the applicator has a radius of curvature about equal to a radius of curvature of the tubular device.

24. (Original) The method of Claim 18, further comprising rotating the device along a central longitudinal axis of the device.

25. (Withdrawn) A system for coating a tubular implantable medical device with a coating composition, comprising:

an applicator substrate having a surface configured to receive a composition and to transfer the composition to a tubular implantable medical device; and

a mandrel to support a tubular implantable medical device in close proximity to or in contact with the applicator substrate.

26. (Withdrawn) The system of Claim 25, additionally including an apparatus to rotate the mandrel.

27. (Withdrawn) The system of Claim 25, wherein the surface of the applicator is substantially flat.

28. (Withdrawn) The system of Claim 25, wherein the device comprises a hollow, longitudinal bore and wherein the applicator is further configured to fit into the hollow, longitudinal bore of the device.

29. (Withdrawn) The system of Claim 25, wherein an outer surface of the mandrel comprises a non-stick material.

30. (Withdrawn) The system of Claim 25, further comprising a leveling apparatus configured to be positioned along the surface of the applicator substrate for reducing the variation of composition thickness.

31. (Withdrawn) The system of Claim 25, wherein the applicator substrate is movable.

32. (Withdrawn) A system for coating a tubular implantable medical device with a coating composition, comprising:

a reservoir holding a coating composition;

an application roller configured to receive the coating composition from the reservoir; and

a support element to support a tubular implantable medical device in close proximity to or in contact with the application roller.

33. (Withdrawn) The system of Claim 32, further comprising a metering roller in communication with the application roller.

34. (Withdrawn) The system of Claim 32, further comprising a barrier positioned adjacent to the metering roller for removing excess composition from the metering roller.

35. (Withdrawn) The system of Claim 32, wherein the surface of the application roller has grooves.

36. (Withdrawn) The system of Claim 32, wherein the reservoir is housed within the body of the application roller, and the application roller comprises pores in the surface of the application roller and in communication with the reservoir such that the coating composition can leak out of the pores to be disposed on the surface of the application roller.

37. (Withdrawn) The system of Claim 32, further comprising a leveling member to provide a uniform thickness of coating composition on the surface of the application roller.

38. (Withdrawn) The system of Claim 32, further comprising a temperature controller in communication with the reservoir for heating or cooling the coating composition.

39. (Withdrawn) The system of Claim 32, wherein the support element is a mandrel configured to be inserted into a longitudinal bore of the device.

40. (Withdrawn) The system of Claim 32, wherein the support element is a cylindrical body configured on which the tubular body can rest.

41. (Original) A method of coating a tubular implantable medical device, comprising:

submerging a portion of a tubular implantable medical device into a coating composition along a longitudinal length of the device; and

rotating the device along a longitudinal central axis of the device while the device is partially submerged in the coating composition.

42. (New) The method of claim 9, wherein the surface of the applicator substrate includes vertical grooves, horizontal grooves, grooves with a zigzag pattern, grooves in a discontinuous pattern or any combination thereof.

43. (New) The method of claim 9, wherein the layer of the composition is applied to the device in a continuous manner.

44. (New) The method of claim 18, wherein the layer of the composition is applied to the device in a continuous manner.